45.2%), or antidepressants. However, younger children were more likely than older children to receive antipsychotics (65.7% versus 53.1%) and stimulants (45.0% versus 29.9%). Between 2005 and 2007, psychotropic medication use changed within the younger age group, with anticonvulsant use decreasing by nearly 10% and stimulant use increasing by 7%. **CONCLUSIONS:** Psychotropic medication use is prevalent in both younger and older children with bipolar spectrum disorders. Younger children are significantly more likely to receive antipsychotics and stimulants as compared with older children, and less likely to receive lithium, anticonvulsants, or antidepressants.

PMH87

NATIONAL TRENDS IN PRESCRIBING ANTIDEPRESSANTS FOR DEPRESSION—BEFORE AND AFTER FDA ADVISORY ON RISK OF SUICIDALITY AMONG CHILDREN AND ADOLESCENTS

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OBJECTIVES: To evaluate the national trends in prescribing antidepressants for depression before and after the FDA advisory regarding the risk of suicidality for pediatric patients in 2003. **METHODS:** Visit-based data 1996–2007 from the National Ambulatory Medical Care Survey and the National Hospital Ambulatory Medical Care Survey were analyzed. Data were analyzed among children aged 5–17 years. For comparison, we also analyzed data from adults. We reported the number of visits (office-based and outpatient combined) with a diagnosis of depression and number of visits and proportion with antidepressants prescribed for each two-year period. Robust 95% confidence intervals (CI) were calculated and the results were weighted to reflect national estimates. **RESULTS:** Among children, the number of depression visits increased steadily during the pre-advisory period from 1996–1997 (2.4 million; 95% CI: 1.8–3.1) to 2002–2003 (4.4 million; 3.3–5.5), and decreased by 16% in 2004–2005 (3.7 million; 2.8–4.5) and 27% in 2006–2007 (3.2. million; 2.3–4.1) compared with the level in 2002–2003 following the advisory. The number of visits with any antidepressant prescribed increased two-fold from 1996–1997 (1.3 million; 0.9–1.7) to 2002–2003 (2.9 millions; 2.3–3.6), and decreased by 28% in 2006–2007 (2.1 millions; 1.5–2.6). The proportion of depression visits with any antidepressant prescribed increased from 1996–1997 (54%; 42%–67%) to 2002–2003 (66%; 59%–74%), and remained stable in 2004–2005 (65%; 56%–74%) and 2006–2007 (64%; 55%–72%) after the advisory. Among adults, the increase in trends was not interrupted by the advisory. Proportion of use for fluoxetine continued to increase after the advisory, while the increasing trend reversed after the advisory for non-fluoxetine SSRIs among children. **CONCLUSIONS:** There was a downward trend in ambulatory utilization of antidepressants prescribed for depression among children after the FDA advisory, coincided with a decrease in visits with a diagnosis of depression. There appeared to be a switch in utilization from non-fluoxetine SSRIs to fluoxetine.

PMH88

ASSOCIATION OF PATIENT CHARACTERISTICS WITH THE USE OF PHARMACOTHERAPY, PSYCHOTHERAPY AND COMBINED TREATMENT FOR DEPRESSION

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OBJECTIVES: To examine the association of patient characteristics including age, sex, race, geographic diversity, income status, insurance type, perceived mental health status, perceived health status, and co-morbidities of depression with the use of pharmacotherapy, psychotherapy and combined treatment for depression. **METHODS:** Depressed individuals in the age group 18–65 were identified from the Medical Expenditure Panel Survey 1998–2006. Pregnant women and individuals with other mental health illnesses were excluded. Individuals with at least four antidepressant prescriptions yearly without any psychotherapy formed the pharmacotherapy group. Individuals with at least four psychotherapy visits yearly and no antidepressants formed the psychotherapy group. Combined therapy group included individuals with at least four psychotherapy visits and four antidepressants yearly. Survey weights were applied to get national estimates. **RESULTS:** There were estimated 1,115,091 patients in the combined group, 3,173,122 in the pharmacotherapy group and 733,264 in the psychotherapy group. Patients in the group 46–65 years were 88% ($p = 0.000$) more likely to get pharmacotherapy than combined therapy, and 45% ($p = 0.007$) less likely to get psychotherapy compared to patients in the age group 18–30. Patients not living in a Metropolitan Statistical Area (MSA) were 80% ($p < 0.000$) more likely to receive pharmacotherapy than combined therapy, compared to patients living in MSA. Patients other than white and black have 85% ($p = 0.040$) higher likelihood of receiving psychotherapy than the combined therapy compared with whites. Patients with self-reported fair or poor physical health were 70% ($p = 0.002$) less likely to receive psychotherapy than combined therapy, compared to those reporting excellent health. Self-reported poor mental health predicts higher likelihood of receiving combined therapy than pharmacotherapy or psychotherapy alone ($p < 0.000$). **CONCLUSIONS:** There are significant differences among the three treatment groups based on their demographic characteristics. Age, region, perceived overall health status and perceived mental health status were significant predictors of treatment received by the patients.

PMH89

TRENDS IN U.S. OUTPATIENT PHYSICIAN VISITS AND MEDICATION TREATMENT PATTERNS FOR PEDIATRIC ADHD: 1998–2007

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OBJECTIVES: To describe 10-year trends in patient, physician and prescribed medications during outpatient visits for pediatric attention-deficit/hyperactivity disorder (ADHD) **METHODS:** We identified all visits in children (3–18) with ADHD (ICD-9 314.00/314.01) from 1998–2007 utilizing two national probability samples: the National Ambulatory Medical Care Survey and the National Hospital Ambulatory Medical Care Survey. We excluded pre/post surgery visits for a final sample of 584,276 visits and then weighted these visits to be representative of the US (using SUDAAN software) before calculating frequencies to characterize trends in patient and practice factors, as well as ADHD medication utilization. **RESULTS:** Visits for ADHD in children increased from 7.9 to 15.3 million (93%) from 1998–2007. Across all years, ~75% of visits were made by males. Visits were frequently made by white children (>80% in all years) with a trend of increasing visits by non-white children by 2006–2007 (13.0% in 1998–1999 to 20.1% by 2006–2007). Visits among pediatricians rose from 38.3% in 1998–1999 to 48.4% in 2006–2007 with a decrease in specialist visits (from 43.1% to 33.7% of all visits). Across all years, mono-therapy was the predominant medication prescription (>60%), although ~1/3rd of all visits did not note an ADHD medication. The use of methylphenidate mono-therapy dropped from 40.8% in 1998–1999 to 27.9% in 2006–2007. Dextroamphetamine mono-therapy rose from 19.3% to 28.7% from 1998–1999 to 2002–2003, but then fell to 22.3% by 2006–2007. The use of newer non-stimulant medications was apparent starting in 2002, but remained low (~10%) across the rest of the interval. **CONCLUSIONS:** Visits made by children with ADHD increased over the decade, while use of medications for ADHD, particularly stimulants, decreased by 2006–2007 with no corresponding increase in the use of newer non-stimulant agents. New therapeutic options, changing guidelines, and emerging safety concerns make this an important area for ongoing research.

MENTAL HEALTH – Conceptual Papers & Research on Methods

PMH90

WEB-SURVEYS: REAL WORLD EVIDENCE GATHERING AND MINIMIZING UNCERTAINTY IN ECONOMIC MODELS

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OBJECTIVES: From a Canadian societal perspective, little is known about the impact of Attention Deficit Hyperactivity Disorder (ADHD) in adults. A methodology for the design and conduct of a web-based survey used to populate a Canadian economic model is described. **METHODS:** An IRB approved, wed-based survey was administered to evaluate the impact of ADHD in pre-identified Canadian subjects with this condition. There were 3 subgroups of interest: an ADHD group with self-reported controlled symptoms, an ADHD group with self-reported uncontrolled symptoms, and a non-ADHD reference group. Eligible participants received a 28-item questionnaire (English or French) which evaluated socio-demographic characteristics, ADHD treatment, co-morbidities, health care resource utilization, functional status (Sheehan Disability Scale), productivity (Work Productivity Assessment and Activity Impairment; WPAI), and health-related quality of life (EQ-5D). Validation rules were pre-programmed to optimize data quality and survey completion at the point of data entry. EQ-5D utilities and productivity losses from WPAI were used to inform an economic model. Other data were used as supportive information. **RESULTS:** The targeted number of completed questionnaires, n = 174, was reached within 2 weeks of study launch after 1,878 survey invitations were circulated. More specifically, 69 controlled, 70 uncontrolled and 35 non-ADHD subjects responded. Among participants, 56% were male, mean age was 35 years, 43% were diagnosed with ADHD in adulthood, and the majority responded in English. Functional status and utility values were significantly lower for subjects with uncontrolled versus controlled ADHD. Employment rates were lower (59% vs. 74%, $p = 0.06$), and overall work impairment was significantly higher for uncontrolled versus controlled ADHD subjects, respectively. **CONCLUSIONS:** Web-based surveys are a cost and time efficient methodology for evidence gathering in support of economic evaluations. Despite some inherent limitations of online studies, such as generalizability, survey variables and outcomes can be tailored to collect data from populations and sub-groups of interest.

PMH91

EXAMINATION OF DOCTORS' PRACTICE AND PRESCRIBING PATTERNS TOWARD SELECTIVE SEROTONIN REUPTAKE INHIBITORS AND SERTONIN-NOREPINEPHRINE REUPTAKE INHIBITORS

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OBJECTIVES: None of the published literature comparing outcomes measures between serotonin reuptake inhibitors (SSRIs) and sertonin-norepinephrine reuptake inhibitors (SNRIs) control for doctors' practice and prescribing patterns due to the limitations of claims databases. We showed how to derive doctors' practice and prescribing patterns for this group of patients from U.S. claims data. METHODS: